

MULTISPEED® 500-C-PVC high flexible, safety against high bending in drag chain systems, low torsion, screened, EMC-preferred type, meter marking



Technical data

- Special drag chain cables for high mechanical stress in adapted to DIN VDE 0281 part 13 and E DIN VDE 0245
- **Temperature range**
flexing -5°C to +80°C
fixed installation -30°C to +80°C
- **Nominal voltage** U_0/U 300/500 V
- **Test voltage** 3000 V
- **Insulation resistance**
min. 100 MOhm x km
- **Minimum bending radius**
flexing 7,5x cable \emptyset
fixed installation 4x cable \emptyset
- **Coupling resistance**
max. 250 Ohm x km
- **Radiation resistance**
up to 80×10^6 cJ/kg (up to 80 Mrad)

Cable structure

- Bare copper, fine wire conductors, Unilay with short pitch length
- Special TPE core insulation
- Black cores with continuous white numbering
- Green-yellow earth core (3 cores and above)
- Stranding:
<7 cores: cores stranded in a layer with optimal lay-length around a filler as per construction
 ≥ 7 cores: cores stranded with optimal lay-length to bunch-construction with low torsion strength, optimal selected short lay-length around a filler
- Special-PVC inner sheath YM2 extruded as filler with pressure grey (RAL 7001)
- Screen of Cu braid bare, coverage 85% max., with optimal bunch
- Fleece separator, ensure good dismantling ability
- Special-PVC outer sheath, especially resistant against fatigue strength
- Sheath colour pine green (RAL 6028)
- with meter marking, change-over in 2009

Properties

- PVC self-extinguishing and flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- Low adhesion
- High property of alternating bending strength
- High resistant to mechanical strain
- Long life durability due to low friction-resistance
- Better chemical resistance
- Oil resistance
- High stability
- Higher economical solution
- Reduced \emptyset , results low weight of moving materials
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

- G = with green-yellow earth core;
x = without green-yellow earth core (OZ).
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- **unscreened analogue type:**
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Application

HELUKABEL® MULTISPEED 500-C-PVC are installed there, where the extreme requirements for the cables are necessary. The selected materials and lay-up technique permit these high flexible cables for permanent application in drag chains for long distances, high and low speed of movements.

These high flexible PVC control cables are suitable for shift- and bending stresses in machines and machine tool constructions. These are installed in dry and moist rooms with free movement without tensile stress or forced movements.

These screened cables are particularly suitable for the interference-free transmission in instrumentation and control engineering applications. For applications which go beyond standard solutions (for example for composting appliances or high shelf conveyors with extremely high processing speeds etc.) we recommend for our especially developed enquiry sheet for energy guiding systems.

Before installation in cable trays please read the instructions. Further technical details see selection table for drag chain cables, see lead text.

EMC = Electromagnetic compatibility

To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.

CE = The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

Part No.	No. cores x cross-sec. mm ²	Outer \emptyset app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.	Part No.	No. cores x cross-sec. mm ²	Outer \emptyset app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
24086	2 x 0,5	6,2	30,0	88,0	20	24103	3 G 1	7,6	59,0	131,0	17
24087	3 G 0,5	6,7	36,0	101,0	20	24104	4 G 1	8,1	70,0	164,0	17
24088	4 G 0,5	7,2	42,0	116,0	20	24105	5 G 1	8,9	84,0	198,0	17
24089	5 G 0,5	7,6	48,0	146,0	20	24106	7 G 1	13,6	106,0	252,0	17
24090	7 G 0,5	11,4	64,0	181,0	20	24107	12 G 1	14,6	174,0	410,0	17
24091	9 G 0,5	11,4	80,0	219,0	20	24108	18 G 1	18,4	240,0	550,0	17
24092	12 G 0,5	12,4	105,0	271,0	20	24109	25 G 1	21,0	332,0	756,0	17
24093	18 G 0,5	14,7	137,0	374,0	20						
24094	25 G 0,5	17,1	210,0	542,0	20						
24095	2 x 0,75	6,8	40,0	96,0	18	24110	3 G 1,5	8,4	75,0	166,0	16
24096	3 G 0,75	7,3	48,0	111,0	18	24111	4 G 1,5	9,1	90,0	199,0	16
24097	4 G 0,75	7,8	55,0	140,0	18	24112	5 G 1,5	10,2	108,0	229,0	16
24098	5 G 0,75	8,3	66,0	161,0	18	24113	7 G 1,5	15,8	157,0	304,0	16
24099	7 G 0,75	12,7	85,0	227,0	18	24114	12 G 1,5	17,4	240,0	502,0	16
24100	12 G 0,75	13,7	135,0	317,0	18	24115	18 G 1,5	21,3	355,0	709,0	16
24101	18 G 0,75	17,1	190,0	486,0	18	24116	25 G 1,5	24,3	448,0	939,0	16
24102	25 G 0,75	19,5	275,0	651,0	18						
						24117	4 G 2,5	11,2	134,0	270,0	14
						24118	5 G 2,5	12,2	175,0	335,0	14

Dimensions and specifications may be changed without prior notice. (RC01)